In the Beaver Dam Eye Study, approximately 5,000 people had their eyes examined between 1988 and 1990. Participants were examined again five, 10 and 15 years after the initial exams to study the factors leading to the development of eye diseases.

During this time, researchers found that 30 percent of study participants had a cataract at the first examination and 25 percent of those who initially did not have one had developed one over the next five-year interval.

Additionally, 20 percent of study participants had signs of early macular degeneration at the first examination and 11 percent of those who initially did not have this had developed signs over the next five-year interval.

In 1992, the Epidemiology of Hearing Loss study began examining participants. Hearing loss was found to be very common; 46 percent of people 48-to-92-years old and 89.5 percent of people over 80-years old had a hearing loss. Twenty-one percent of those who initially did not have a hearing loss had developed one over the next five years. Also, men were four times more likely than women to have a hearing loss.

Researchers were able to determine some factors that could lead to these eye diseases and hearing loss (see center box). Researchers also found that 24.5 percent of adults over 53-years old and 62.5 percent of adults 80-to-97-years old had an impaired sense of smell. Men were more likely than women and people with a history of stroke or epilepsy were more likely to have an impaired sense of smell. Current smokers were twice as likely as people who never smoked to have an impaired sense of smell.

Factors associated with cataracts:
- family history of cataracts
- diabetes
- smoking
- ultraviolet-B exposure

Factors associated with macular degeneration:
- family history of macular degeneration
- high blood pressure
- sunlight exposure
- smoking

Factors associated with hearing loss:
- noise exposure
- diabetes
- atherosclerosis
- smoking
- obesity

Researchers also found that 24.5 percent of adults over 53-years old and 62.5 percent of adults 80-to-97-years old had an impaired sense of smell. Men were more likely than women and people with a history of stroke or epilepsy were more likely to have an impaired sense of smell. Current smokers were twice as likely as people who never smoked to have an impaired sense of smell.

By examining the next generation—participants taking part in the Beaver Dam Offspring Study—we hope to find more risk factors that may lead to vision loss, hearing loss, impaired sense of smell, and other age-related-health concerns. The information gained from this new study may help reduce the burden of sensory impairments in future generations.

What your parents taught us

Study participation update:
We are nearly half finished. Please help raise the thermometer’s mercury by scheduling an appointment with the study!

Thank you to the 2,000 people who participated in the study between June 2005 and April 2007. Your involvement is so important! Thank you for helping reach the goal of 4,500 people seen!

See us at our new location

Becky Gebhardt, Shirley Vant Hoff, Tracy Schweiner, Kathy Campbell, Tom Dugolenski, Erica Schroeter and Jo Welsch look forward to seeing you at the study’s new location—130 Warren Street (entrance A), directly behind the new Beaver Dam Community Hospital.

Better Health for Future Generations
**Beaver Dam Offspring Study**

**Study Participants’ Frequently Asked Questions**

🌟 **What’s this study about? Why was I asked to take part in it?**

Scientists have found that the way we live, our environments and our genes help determine the onset of sensory disorders and vascular diseases. With dramatic changes in lifestyle, socioeconomic conditions, and childhood and early-adult exposures that have occurred in the United States during the last century, it is important to study the post-World War II generation to determine their risk of sensory disorders compared to earlier generations. This will help us prepare for the growing demands on the healthcare system as baby-boomers age. The more we know about what causes sensory disorders as we age, the better we can help prevent eye diseases, hearing loss, cardiovascular-health problems and the like.

Since everyone eligible for the study is invited to participate, rather than only those who have health problems or seek medical care, the study’s results will provide valuable information regarding how many people are affected by these conditions and why some people are affected by certain conditions while others are not.

🌟 **Who’s invited to participate? Isn’t this study only for people who live in Beaver Dam?**

Those who are 21-years old or older, and had at least one parent who participated in the Beaver Dam Studies, may be eligible to participate in the Beaver Dam Offspring Study, whether they live in Beaver Dam or elsewhere. Study participants do not need to be genetically related to a parent who participated in the earlier studies; adopted and step children have been invited and are welcome to take part in the study. True, we are studying genetic relationships, but we are also studying environmental relationships.

🌟 **What happens during a study examination?**

A study examination includes having each participant’s vision, hearing, sense of smell, and sense of taste tested. We will also obtain images of each participant’s eyes and tongue. Additionally, we will assess each participant’s cardiovascular health by measuring blood pressure and performing an ultrasound scan of the carotid arteries in each participant’s neck. We will collect a blood sample to check cholesterol level, to check for diabetes and other diseases, and to keep for genetic studies. We will measure height and weight and ask many health-related questions. Anyone uncomfortable with any component of the examination may decline completing that part.

🌟 **Aren’t there enough other people to do this?**

This study is a landmark research study investigating four of the five senses—vision, hearing, smell and taste—and other health measures such as cardiovascular health. The study started in June 2005 and will continue into early 2008, with about 4,500 people expected to participate. As of the end of this September, we had seen 1,383 participants. With everyone’s help, we can reach our goal of 4,500 participants seen.

🌟 **How many visits do I need to make? How long does an appointment take?**

Study participants are each invited to be seen one time during the three-year, baseline study. An examination takes approximately 3.5 hours to complete.

🌟 **When do you have appointments?**

We realize that nearly everyone invited to participate in the study is busy with family, friends, work and other interests. We have done our best to make weekday appointments available at different times starting as early as 8:00 a.m., going throughout the day, and starting as late as 5:30 p.m. We also have appointments on Saturdays, for those who cannot get away during the week. In addition, we will see participants around most holidays.